

*Framing of Nuclear Discourse at 5-Year Memorial of the Great East Japan
Earthquake by Two English Newspapers in Japan*

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Abstract

A useful theoretical framework for the study of news coverage is framing. According to Entmen (1993) to frame is to select some aspects of a perceived reality and make them more salient in a communicating text. Making certain aspects more salient than others in media content leads to different construction of reality. This study uses quantitative frame analysis to find out frames used by news media in their portrayal of 5-year memorial of Great East Japan Earthquake, which is also known as 3/11. Using a convenient sample and a signature matrix this research paper tries to find out how the 5-year memorial of this tragic catastrophe was covered by two main English language newspapers, namely, The Japan News and The Japan Times. Our analysis shows that the “5-year memorial was constructed differently by two different newspapers. The unit of analysis was the theme, ‘triple disasters’ namely earth quake, tsunami and nuclear accident in Fukushima. The Japan News framed the nuclear energy discourse positively, while The Japan Times framed it negatively, something which should be phased out systematically. Differences in the tone of coverage and the use of sources across the news media were also found. However, the main differences are not so surprising because, Japan’s nuclear history is full of monopolies and lavish subsidies, cozy business-government relationships behind closed doors. What is at stake is the so called ‘watch dog function’.

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Introduction

The media today can be seen as having four major responsibilities or functions. These are to persuade or present opinion, to inform, to entertain, and to regulate (Stephen J, 2008). Not least among these is the regulatory function of the media. The practice, called watchdog journalism, is a style of writing or broadcast aimed at identifying a current societal problem, either hidden or overt, and offering opinion on necessary action. As mentioned by (Gamson et al., 1989), ideally, any media system that facilitates democracy should provide its citizens accurate information that might be useful to live a normal and unstressful life, because people have placed their trust in the watchdog function of the media. However, the, 'watchdog function' becomes ineffective when governments impose excessive control and monitoring on the media. This has been questioned by many people today. Classical liberal theorists from the late 17th Century onwards have argued that right to information along with transparency always provide the best protection from the excesses of power. The idea of the press as "Fourth Estate", as an institution that exists primarily as a check on those in public office, is based on the premise that powerful states and other public institutions had to be prevented from overstepping their bounds. The media working independently of government, even as its freedoms were guaranteed by the state, was supposed to help ensure that their vigilance happens without any interference. Watchdog function of the media covers a wide range of different types of journalism. In a democratic state, the watchdog press monitors the day-to-day workings of government, and other institutions, thereby helping citizens to monitor the efficacy of their performance. Reporting that goes beyond what officials or their spokespersons say, is also a form of watchdogging or investigative journalism. In the words of Gamson et al, "The lens through which media provide information is not neutral but evinces the power and point of view of the political and economic elites who operate and focus it. Academics have long been interested in the social and economic organization that affects media and manufacturing of news by media organizations. According to Sigal (1973), journalists "are exploited by their sources either to insert information into the news or to propagandize."

Having said that, scrutinizing the role of Japanese print media, especially two important English newspapers in discussing, an important, yet controversial news topic for Japanese people, namely the Nuclear Discourse, at 5-year memorial of great earth quake, which was known as Triple Crisis—an earthquake, tsunami, and nuclear reactor disasters, is the main focus of this research paper. Understanding how the media portrays events is important because research has shown that people's attitude and judgments can be affected by the media's presenting or framing of issues (Shas et al., 1996, Gamson, 1992, Iyenger, 1994, McLeod ,1995), especially when people lack firsthand knowledge and experience of the issue in question (Giltin, 1980). The topic of this paper, namely "Framing of Nuclear Discourse at 5-Year Memorial of Great East Japan Earthquake (2016)" is warranted in order to find out not only what was presented, but also how it was presented. The nuclear discourse in Japan is controversial because it could be said that it has been viewed in Japan with skepticism as well as an investment in Japan's progress and future. After formulating the research questions, and reviewing the latest available literature on the subject, this paper proceeds first by providing the historical background

of nuclear energy in Japan based on a recent literature review, and then we discuss briefly the theoretical framework and methodology. To analyze the content of the two selected newspapers, we use a signature matrix, and the frame theory developed by (Gamson and Lasch, 1983) which was later elaborated by (Wolfsfeld, 1997).

Research Questions

1. Can evidence of framing be found in nuclear discourse of at 5-Year Memorial of Great East Japan Earthquake (2016) in the two newspapers, namely The Japanese Times and The Japanese News? What specific media frames and media packages can be identified?
2. Are the news discourse sponsored and packaged by competing interest groups or political actors? Is the use of sources about the nuclear discourse of at 5- Year Memorial of great east Japan earthquake in the two mentioned newspapers the same or different?
3. Do the frames vary between the same two newspapers?

Literature Review

Gamson & Modigliani, as early as 1989 had studied the shifting media discourse on nuclear power from the beginning of the nuclear age in 1945 through the accident at Chernobyl in 1986. According to their findings, until the early 1970s, there was no anti-nuclear power discourse in the mass media. Nuclear power was a naturalized symbol of technological progress, part of the long story of human mastery of nature. Even the partial meltdown at the Fermi nuclear reactor near Detroit in 1966 had failed to produce any media discourse on the merits and demerits of nuclear power. Nuclear discourse had moved into the contested realm during the 1970s. (Gamson, 1988) traces the role of the environmental and anti-nuclear power movements in this evolution, showing the complex interaction among movement and more institutionalized actors in the process. On this issue, at least, far from aiding the maintenance of hegemony, challengers were helped by the media. The meanings preferred by powerful corporate and political actors proved vulnerable and media norms and practices worked to some extent against their preferred interpretation. Talking of nuclear policy in Japan, (Sherry Martin Murphy 2014), makes use of the case of the nuclear power industry post-Fukushima to lay bare how grassroots activism is disrupting the elite-driven model of Japanese democracy popularized in the developmental state literature.

According to (Aldrich, 2012) “using a mix of top-down directives and well-funded policy instruments, Japan successfully created one of the most advanced commercial nuclear power programs in the world. Government officials and local politicians actively supported the nuclear industry, along with its lucrative handouts to host sites, while Japanese citizens tacitly gave support by accepting both the benefits and the risks. However, because of the massive devastation at the end of World War II, the Japanese population had developed a social condition known as *kaku arerugi* (nuclear allergy). The atomic bombing was able to create a strong antinuclear weapons sentiment in Japan, as did the Lucky Dragon incident less than a decade later. As mentioned by Yoshioka, in “The social history of nuclear power” (1999) the two longest-standing antinuclear

organizations in Japan, known as “*Gensuikyo* and *Gensuikin*”, have emerged from these events and continue to hold rallies and disseminate information on nuclear issues.

As we notice above, nuclear energy, or the nuclear discourse is one of the contested topic that is been debated by proponents of the nuclear energy as well as who oppose nuclear energy. The impact of the “Fukushima nuclear crisis” was enormous that it carries implications for nuclear and renewable energy policies in Japan today. As stated by (Tkach-Kawasaki, 2012) within minutes of the Tōhoku Earthquake that occurred at 14:46 on March 11, 2011, the news spread around the world, aided by international news agencies and the Internet. Within an hour, the initial disaster was compounded by an ensuing tsunami with horrifying images and videos of great masses of water swiftly overtaking buildings, homes, and businesses located along Japan’s northeastern coast.

The Fukushima nuclear power plants were seriously damaged as a result of the tsunami. Residual heat caused fuel meltdowns in three of the six reactors. Temperatures rose above 2,000 degrees Fahrenheit melting the zircaloy (zirconium alloy) tubes containing the fuel pellets in the reactors. In order to cool the reactors and ensure that the spent fuel rods would remain underwater the engineers pumped in thousands of gallons of seawater. According to “*Yomiuri Shimbun*”, this procedure resulted in approximately 100,000 tons of contaminated water flowing into the ground and the ocean. Adding to the chaos, hydrogen explosions blew the tops off three of the buildings containing the reactors. Japanese authorities eventually categorized the incident as a 7 (“major accident”) on the International Nuclear Event Scale (INES) due to the amount of radiation released. The 1986 Chernobyl disaster is the only other atomic accident to date in this category. As of October 2011, more than 75,000 residents of the area were unable to return to their homes in Fukushima Prefecture because of high levels of radioactivity. Since the accident began, a number of agricultural companies were forced to stop exporting food from the area due to radioactive contamination of tea, beef, rice, and citrus products.

To make it worse, it is reported that, managers at the Kyūshū Electric Power Company were discovered tampering with a public opinion poll posted on 26 June 2011. The scandal, known as the *yarase meiru* (staged mail) scandal, involved employees at the utility sending 140 supportive comments to the station, which were enough to tip the balance of opinion in favor of restarting.

Aldrich (2012), states that the government in Japan has provided a number of different types of support to Tokyo Electric Power Company (TEPCO) and other regional power monopolies in the early years of nuclear power. One form of help involved logistical and financial support in mapping out potential host communities throughout Japan. Government bureaucrats assisted the utilities both in the physical charting of potential locations—to ensure that they met certain technocratic criteria, such as having access to cooling water, proximity to existing power grid lines, support from relatively aseismic rock, and so forth—and in mapping the social characteristics of nearby communities.

The high and unstable price of oil—critical for Japan’s petrochemical industries, as well as a host of other fields, including automobiles and oil refining—created pressure for

Japanese planners to achieve a new goal: energy security. The government hoped that between hydroelectric dams and nuclear power plants, Japan would be able to wean itself off oil from the Middle East. In order to promote nuclear power, the central government created a new agency, the ANRE (Agency for Natural Resources and Energy, or *Shigen Enerugi Chō*). Over the course of the next decade, more spin-offs were created, including the Japan Atomic Energy Relations Organization, the Japan Industrial Location Center (*Nihon Ricchi Sentā*), and the Center for the Development of Power Supply Regions. Large amount of budgets of these agencies were focused on the placement of new nuclear power plants through-out the country, and to improve the image of nuclear power.

However, 3/11 was a wakeup call for many Japanese who already thought that something is drastically wrong in Japan. Since that day newspapers, top journals, books, television and the internet have all primed a cascade of news and opinions about the triple disaster of earthquake, tsunami and nuclear meltdown at Fukushima, and what should be done to overcome its catastrophe and discourage reconstruction.

With well-organized and informed opposition groups operating since the early 1980s, including the Citizens' Nuclear Information Center (CNIC, or *Genshiryoku Shiryō Jōhō Shisetsu*) and the antinuclear newspaper *Hangenpatsu Shinbun*, many communities have fought back in highly publicized battles. The accidents at Three Mile Island and Chernobyl worried many Japanese residents but authorities reassured them that these would not be possible in Japan, given its strong engineering credentials, in-depth safety controls, and highly educated and motivated staff. The government also enlarged the range of projects to which the *Dengen Sanpō* funds could be applied, lengthen the period for which they would be available, and increased the pool of funding provided to local communities. Overall, despite ongoing opposition, the government and regional energy monopolies saw few reasons to worry about the future. One white paper envisioned the construction of an additional 17 nuclear power plants in Japan by 2024, which would increase the amount of electricity generated by nuclear power from one-third to roughly one-half.

It is been reported on 8 December 1995, that the experimental sodium-cooled fast breeder reactor known as the Monju experienced a huge sodium leak. The resulting fire was hot enough to melt various steel structures in the chamber. The Japanese agency in charge of the Monju, however, decided to suppress details of the accident and to doctor a publicly released videotape of the leak and its aftermath. Local residents successfully fought attempts to restart the experimental reactor until the summer of 2005, when the Supreme Court ruled in favor of restarting. Some four years after the Monju fire, Japan experienced its worst nuclear accident to date. On 30 September 1999, when three workers at the nuclear fuel cycle company JCO in Tokaimura were preparing fuel for one of Japan's experimental fast breeder reactors, they set off a criticality (an increase in nuclear reactions in radioactive material) that exposed them to tremendously high levels of radiation. Two of the three died from extreme radiation exposure, and local residents in the nearby town were told to remain indoors to avoid contamination.

These were not the only events that began to break apart public support and faith in the industry. Revelations that TEPCO, the Tokyo Electric Power Company, had covered up numerous accidents, leaks, and cracks since the 1980s also has come to light. Engineers came forward in the early 2000s to reveal that at least 30 serious incidents had been hidden by company management. In response, several upper management executives lost their jobs, and the central government ordered the shutdown of TEPCO's 17 nuclear reactors in 2002. These events further undermined the industry's credibility (Aldrich, 2012).

In addition, in the past and again following the Fukushima disaster, the Japanese government has utilized exclusive reporter's clubs (*kisha karabu*) in order to ensure that media coverage reflects government's policy. The continual existence of the discriminatory system of *Kisha kurabu*, which restrict access to information to their own members, is a key element that caused the ranking of Japan's media to drop from 22 to 53rd since the Fukushima disaster (Reporters without borders 2013). Further Japan has been negatively affected by a lack of transparency and the denial of access to information a subject both directly and indirectly related to Fukushima following the Fukushima accident, while there has been much evidence in Japan's of censorship of nuclear industry coverage. The authorities also imposed a ban on independent coverage of any topic related directly or indirectly to the accident and the Fukushima Daiichi nuclear power plant. Moreover, some freelance journalists who complained that public debate was being stifled were subject to censorship, police intimidation and judicial harassment (Reporters without borders). According to (Cohen et al., 1994) the ruling party namely LDP politicians had little incentive to give voice to anti-nuclear interests because domestic industry—the nation's biggest energy consumers—provided a large share of the financing politicians needed to survive expensive campaign cycles. Ramseyer (2011) states that moreover, politicians were able to subordinate broad public interests to those of the utility firms because majority of worker's voters did not live in districts that hosted a nuclear power plant; they did not bear the direct risks of a nuclear accident, but they did enjoy the benefits of a stable energy supply. Indirectly the media, too, had played a part because it was reliant on the financing energy companies provided through advertising (Kingston, 2012).

Freelance journalists and magazines were sued after publishing articles on the alleged collusion among companies and TEPCO. Talking reporters and publishers to court shows the intent to cover up the truth. In addition, in early December 2013, the Japanese parliament passed a state secret protection law that may curtail future public access to information on a wide range of issue, including Fukushima (Sieg and Takenaka, 2013) which has been condemned by critics of the ABE administration. Public officials and private citizens who leak "special state secrets face prison terms up to ten years, while journalists who seek to obtain classified information could be imprisoned for five years (McCurry, 2012). These developments demonstrate the government's continued purge to silence anti-nuclear dissent in the face of rising public opposition to the nuclear technology.

Methodology and theoretical framework

The concept of framing, or frame research has become increasingly attractive in media research, especially interdisciplinary research including communication, sociology, and political science. As stated by (Reese, 2009) framing refers to the way events and issues are organized and made sense of, especially by media, media professionals, and their audiences. As both a noun and a verb, the word frame suggests an active deliberate process and a result. According to Entman (1993), frame is determined in large part by its outcome or effect: To frame is to select some aspects of a perceived reality and make them more salient in communicating text, in such a way as to promote a particular problem definition, casual interpretation, moral evaluation, and/or treatment recommendation. Similarly, (Tankard Hendrickson, Siberman, Bliss, and Ghanem, 1991) define framing as “A frame is a central organizing idea for news content that supplies a context and suggests what the issue is through the use of selection, emphasis, exclusion, and elaboration.” This research paper mainly uses the frame analysis model developed by Gamson and Lasch and subsequently elaborated by (Tankard, J., Hendrickson, L., Silberman, J., Bliss, K., & Ghanem 1991).

As principles of partiality and selectivity, made of codes of emphasis, interpretation, and presentation –media frames are routinely used by newsmakers to organize verbal and visual discourses into forms that will be accessible to the everyday reader, viewer or listener. In rendering opinions, laying blame, and presenting solutions about problematic issues, actors and events, journalists inevitably accentuate some points of view while downplaying others, thus limiting the range of interpretable meanings available to the public (Entman, 1991, Gamson and Modigliani, 1989, Giltin, 1980 Pan and Kosicki, 1993). It is in this sense that the concept of framing can be said to capture the numerous ways in which the media set the discursive context within which individuals may come to locate, perceive, identify and label the events and happenings around them (Goffman, 1974). Among the many approaches to framing, is the theory of media framing put forward by sociologist (William Gamson and colleagues, 1992). More importantly Gamson and Lasch hold that the ideas that appear in news are best understood as media packages that feature a central organizing idea for events and employ various framing or symbolic devices that support the main idea of the story (Gamson and Lasch, 1983). According to Gamson, journalists engage in arranging random events into a meaningful, organized interpretive package.

The first quantitative measure used in the qualitative reading of the Nuclear Discourse at 5-Year Memorial of Great East Japan Earthquake is the prominence and visibility of a central argument. As indicated by Gamson in his research, central arguments were coded as to be visible if they reach a threshold of at least 10 present prominences in any news item connected with 5-year memorial in the convenient sample of one month. Thus media packages used by the journalists contain core frames or central organizing ideas that help the writers to convey, what is at issue, and the idea of elements of which they are made. Further packages also contain condensing symbols-linguistic and rhetorical devices that tie discrete bits of content together and situate them within an emerging context. Gamson

and Lasch enumerated five framing devices that they believe serve as indicators of framing process at work.

Taking the above interpretations of framing devices for this paper, a metaphor is defined as “the application of a name or descriptive term or phrase to an object or action to which is imaginatively but not literally applicable. Exemplars are defined as the ‘dramatized accounts of real events, whether produced by witnesses, politicians, political activists, or journalists, who are then used to represent abstract forces, issues, or entities. Catchphrases are ‘attempted summary statements about the principal subjects, whether in the form of taglines, slogans, or catchy themes. Depictions are routine characterizations of the principal subject. Consequents are the ‘condensational symbols that project various outcomes associated with different policy decisions. Sometimes both short term and long term consequents are presented. Appeals to principle are ‘condensational symbols evoking moral values, sometimes religious values, and general societal and cultural self-images to generate enthusiasm for particular policy choices.

The construction of a signature matrix was developed as a guideline or a set of working frames that guided the data analysis by the researchers. The first stage of research involved identifying and the cataloging of the various metaphors, catch phrases, visual images, moral appeals and other symbolic devices that characterized the nuclear discourse at 5-Year Memorial of Great East Japan Earthquake. At the second stage, the signature matrix, which consists of two rows representing the interpretive packages and columns indicating, various condensational symbolic devices, such as metaphors, exemplars, catchphrases, depictions, visual images, roots, consequences, and appeals to the principles were constructed on the basis of the findings derived from the content analysis of the nuclear discourse. According to Gamson and Lasch, a “signature matrix” is a device that lists the key frames and links them to salient signifying devices. Further according to them, it is possible to identify the particular signature elements for a given frame, the metaphors, catchphrases, or other symbolic devices used typically to convey or to find phenotype expressions that can be reliably coded.

After several close readings of the articles, features, editorials looking at the photographs connected with it, and thus gaining an overall impression of their slant, discourse about the nuclear were grouped according to two categories. The criterion used was whether news on nuclear discourse in the two newspapers was generally supportive or non-supportive of the nuclear use in Japan. News content was interpreted as supportive whenever, they argue for a compromise, or go ahead with nuclear plans in spite of Fukushima accident. Content about the nuclear discourse was interpreted as non-supportive whenever, they displayed and argue against compromising of and high lights the risks and destruction due to use of nuclear energy.

The sample

The Japan Times is Japan's largest English-language newspaper. It is published by The Japan Times, Ltd. At first, the paper was independent of government control, but from 1931 onward, the Japanese government was mounting pressure on the paper's editors to

submit to its policies. The paper's circulation at that time was about 825,000. On the other hand, *The Japan News* is owned by *The Yomiuri Shimbun* (読売新聞), a Japanese newspaper published in Tokyo, Osaka, and Fukuoka and other major Japanese cities. It is part of the Yomiuri Group, Japan's largest media conglomerate. Founded in 1874, the Yomiuri Shimbun is credited with having the largest newspaper circulation in the world. In 2010, the daily was the number one in the list of the world's biggest selling newspapers with a circulation of 10,021,000. As of mid-year 2011, it still had a combined morning-evening circulation of almost 13.5 million for its national edition.

The selected period for this research was the 31 days of March, namely one-month period starting from 1st of March 2016 to 31st of March 2016 and the focus of research as 3/11 because great earth quake happened on the 11 of March 2011.

Signature Matrix

Table 1. Anti-nuclear Frame (*The Japan Times*)

Meta Frame	Nuclear energy is destructive to Japan
Core frame	The injunction issued by the Otsu District Court on Wednesday to halt the operation of reactors 3 and 4 at Kansai Electric Power Co.'s Takahama nuclear power plant in Fukui Prefecture Should serve as a strong warning to the power industry, the government and the nuclear regulators.
Core Positions	The power companies should rethink their rush to restart their reactors, which is driven by their desire to improve short-term profitability, and examine whether they are qualified to manage the risks involved in nuclear power generation so that a Fukushima-type catastrophe will never be repeated. The NRA should uphold the 40-year rule to cut the weight of nuclear power as well as to ensure safety of reactors.
Metaphors	“Utility Brass” Nuclear Watchdog” “A spotlight was thrown” Progress has been made, albeit at a snail’s pace
Historical Exemplars	The crisis at the six-reactor plant on the Pacific coast started when tsunami triggered by the massive earthquake of March 11, 2011 flooded power supply facilities and crippled reactors. Worst nuclear accident since Chernobyl in 1986.
Catchphrases	Quake prone Japan In the interest of human rights. Should serve as strong warning to the power industry
Depictions	Fukushima dump site, Tsunami triggered crisis Fukushima nuclear crisis
Visual Images	Front page b/w photographs, and photographs in other pages closely connected to the 3/11 event, graphs, and areal maps, and other illustrations.

Consequences	<p>Facing charges of professional negligence resulting in death and injury. DNA damage found in Fukushima forests Radiation spread over a wide area and forced tens of thousands of people from their homes many of whom will likely never return. The towns of Onagawa and Minamisanriku in Miyagi, among the most severely damaged municipalities, suffered a population loss of 37 percent and 29 percent, respectively, while Otsuchi, Iwate Prefecture, saw a 23 percent fall.</p>
Appeals to Principle	<p>The NRA should uphold the 40-year rule to cut the weight of nuclear power as well as to ensure the safety of reactors. The 40-year rule should not be upheld as a reasonable criterion that uses the procedures on the safe side. Other power companies should also take the court decision and what happened at the Takahama plant seriously and make sure they don't neglect the lessons from the triple meltdown at Tokyo Electric Power Co's Fukushima No.1 plant five years ago. "..such a position runs counter to the common sense principle that in handling a potentially highly dangerous technology like nuclear power, prudence must be the default position. The power companies should rethink their rush to restart their reactors, which is driven by their desire to improve short term profitability, and examine whether they are qualified to manage the risks involved in nuclear power generation so that a Fukushima type catastrophe will never be repeated.</p>

Anti –nuclear Frame

Ethnographic content analysis to find out the main frames shows that in *The Japan Times*, there were 56 news items, including 4 editorials, 191, photographs about 3/11 incident, 7 opinion articles, 7 feature articles, and 6 narratives by various people connected with the about the 5-Year Memorial of Great East Japan Earthquake (2016), which fell in March. Leaving aside the visuals which were also mainly supportive of the anti-nuclear frame, there were 67 news (almost 73%) items dealt with anti-nuclear or nuclear is a disaster theme in the month of March. Among them there were 4 editorials, 3 opinion columns about clearly indicating paper's anti-nuclear stand. Some of these articles had an audio version, which means one was able to hear it on his/her mobile device or I pad, or using a computer, and share it with others.

The Japan Times on the 6th of March 2016, used the "anti-nuclear frame" by titling its editorial in the following way: "Extending Takahama reactor life" (editorial). It argued, "Japan currently has 43 nuclear power reactors -18 of which are more than 30 years old. If the 40-year rule is strictly applied, their number will gradually decline. This conforms not only to the government's policy of reducing Japan's reliance on nuclear power but also to the popular wishes as expressed in media opinion polls, in many of which a majority of respondents oppose the restart of idled reactors and want nuclear power to account for less of the nation's electricity supply than envisaged by the government. The

NRA should uphold the 40-year rule to cut the weight of nuclear power as well as to ensure safety of reactors (p. 10).

Supporting the same anti-nuclear frame, *The Japan Times* editorial on 10th March 2016 was titled: “Troubles at Takahama nuclear plant”.

A recent revelation by TEPCO also highlights its sloppiness in handling the Fukushima disaster. It admitted that as recently as late February, an employee noticed a description in its disaster management manual stating that a reactor must be declared “in meltdown” if 5 percent or more of its fuel rods are determined to be “damaged”. As of March 14, 2011, the company estimated that 55 percent of the fuel rod assemblies of reactor 1 and 25 percent of those at reactor 3 were “damaged”. The Next day, it estimated that 35 percent of the fuel rod assemblies at reactor 2 were damaged. Still, TEPCO refused to use the word “meltdown” for about two more months despite wide spread public skepticism. It is deplorable that the company failed to heed such an important description in its own manual. This only deepens suspicious over the company’s lack of sincerity in dealing with accidents at nuclear power plants.

Reiterating the paper’s anti-nuclear frame, *The Japan Times* editorial 12March 2016, said under a title, “Up grading anti-disaster measures”.

The national and local governments should carefully study the effectiveness of regularly held anti-disaster drills and improve them. It should be determined, for example, how vehicles abandoned on roads and traffic jams in the event of major disasters would hamper rescue and firefighting operations, and how this can be prevented. The bottom line is that anti-disaster plans should be checked regularly to make sure they will really work when disasters strike (p. 7).

The following headlines also show further the paper’s anti-nuclear stand.

“A caution on nuclear restarts” *The Japan Times* 20 March, 2016, p.10.

“Why 3/11 didn’t change Japan” *The Japan Times* 15 March, 2016, p.11.

“Fukushima exec fight the gloom” *The Japan Times*, 28 March, 2016, p. 2.

“Injunction Clouds nuclear policy” *The Japan Times*, 13 March, 2016, p. 9.

“Reactor at Takahama halted automatically” *The Japan Times*, 1 March, 2016, p. 3.

“Three utility brass blamed for reactor meltdowns. TEPCO execs face trail over disaster.” *The Japan Times*, March 1, 2016, p. 1.

“Fault below reactor may be active” *The Japan Times*, 4 March, 2016, p. 2.

The Japan News

It was interesting to note that the other newspaper, namely The Japan News, had only 66 news items for the whole month about the Nuclear Discourse at 5-Year Memorial of Great East Japan Earthquake (2016). There were totally 11 editorials, 40 news items, that 13% and 11 narratives, 47 photographs and one opinion column about the nuclear discourse, and they were mainly not about the ill effects of nuclear use of anti-nuclear but post effects of 5-year memorial, and out of 40 news items, there were 14 hard news, and

33 soft news about the events connected with the 5-year memorial. It would be correct to say that The Japan News showed no clear policy about the nuclear usage in Japan, because the paper took somewhat apathetic attitude towards the nuclear energy neither for it or against it, but the analysis of news content showed that The Japan News was in favour of nuclear energy, not so much emphasizing about the negative side of the nuclear energy. However, the frames and news content was not at all neutral, but bias towards nuclear policy. So the researchers identified the main news frames of The Japan News as bias towards nuclear use in Japan. News items and photographs were more towards positive after effects of the great East Japan earthquake.

Signature Matrix

Table 2. For-nuclear Frame (*The Japan News*)

Meta Frame	Supportive of Nuclear usage in Japan
Core Frame	Govt. needs to thoroughly explain nuclear fuel cycle to U.S.
Core positions	<p>“The nuclear fuel cycle project, which reuses spent nuclear fuel from nuclear power plants, is the main pillar of Japan’s nuclear policy. In view of the serious energy situations, it is essential to make efforts to win understanding on this issue both at home and abroad.”</p> <p>“Court must judge carefully in trial of forcibly indicted TEPCO execs.</p> <p>“How far does the criminal responsibility of individuals extend in an accident caused by an unprecedented natural disaster?...”</p> <p>“We want to see the nuclear watch dog’s approval of the operation of frozen soil shields serve as an opportunity revive fisheries in Fukushima Prefecture.”</p> <p>“Education on hometowns fosters hopes to rejuvenate quake-hit areas...”</p>
Metaphors	<p>“Kindle hope for the reconstruction of disaster affected areas.”</p> <p>“Nuclear watchdog’s approval”</p> <p>“We want the revival of industries with roots in Tohoku to be accelerated...”</p> <p>“...marine products back on their feet remains the biggest issue....”</p> <p>“There are high hurdles to proving the guilt of the accused....”</p> <p>“Central government comes back to life....”</p> <p>“One headache in this regard is that lifting the evacuation orders....”</p> <p>“disasters caused by brute forces of nature ...</p>
Historical Exemplars	<p>“The number of people who were killed or remain unaccounted for totals 18, 455....”</p> <p>“The existing Japan-U.S. nuclear power cooperation agreement that entered into force in 1988 exceptionally allows Japan to reprocess spent nuclear fuel and enrich uranium...”</p> <p>“Memorial ceremonies to mourn disaster victims in the Tohoku region were also held in various places around the country, including areas damaged by the 1995 Great Hanshin Earthquake, the 2004 Chuetsu Earthquake in Niigata Prefecture and the major sediment disaster that happened two years ago in Hiroshima city...”</p>
Catch phrases	“We pray anew for the souls of the victims to rest in peace....”

	<p>“March 11 anniversary a reminder to pass on lessons to future generations...”</p> <p>“We will ceaselessly review disaster-prevention measures by constantly integrating the latest wisdom and knowledge...”</p> <p>“We will continue to hand down our experiences to our children and our children’s children, and to people in the rest of the world....”</p> <p>“...to entice younger generations to return, job opportunities must be available.”</p>
Depictions	<p>“Even though five years have passed since the disaster at Tokyo Electric Power Co.’s Fukushima No. 1 nuclear power plant occurred, nearly 100,000 people from Fukushima Prefecture continue to live as evacuees both in and outside the prefecture.”</p> <p>“Should a massive Nankai Trough earthquake occur; disasters of far greater magnitudes have been forecast. The worst-case scenario predicts 320,000 deaths and 2.38 million houses destroyed...”</p>
Visual images	Related photographs about the 3/11.
Consequences	<p>“Otherwise, there could be serious harmful effects, such as on the one hand, the government resorting to extralegal measures in the absence of constitutional provisions on crisis management, or on the other hand, the failure to take necessary steps...”</p> <p>“Population declines in every municipality will be unavoidable even after the evacuation orders are lifted...”</p> <p>“.. a gigantic Nankai Trough earth quake and a major quake with its hypocenter directly under Tokyo are expected to happen in the near future ...”</p>
Appeals to Principle	<p>“Use of SPEEDI system should be option for nuclear disaster response...”</p> <p>“The important thing is to draw various lessons from the trial and to make use of them to prevent the recurrence of a similar nuclear accident in the future...”</p> <p>“Some ingenuity is needed to spread word about Tohoku’s attractions far and wide...”</p> <p>“Surveys using robots have frequently encountered trouble. It is essential to develop innovative survey technologies.”</p>

For-nuclear energy frame

As mentioned early, the frame analysis of the news content and editorials showed that *The Japan News* was biased towards the use of nuclear energy in Japan. Like *The Japan Times*, it did not take a hard line anti-nuclear approach towards, nuclear use in Japan. The following editorial content shows the bias of the newspaper.

The Japan News, 24th March, 2016, in its editorial on page 4, it said,

“The nuclear fuel cycle project, which reuses spent nuclear fuel from nuclear power plants, is the main pillar of Japan’s nuclear power policy. In view of the serious energy situation, it is essential to make efforts to win understandings on this issue both at home and abroad....”

“The reactivation of nuclear power plants must be accelerated and a so called pluthermal project, in which plutonium is burned in normal nuclear power plants will be filled with spent nuclear fuel, and those plants will become inoperable. “

“The reactivation of nuclear power plants must be accelerated and a so called pluthermal project, in which plutonium is burned in normal nuclear power plants, must be put on track. Shouldn't the Monju Fast breeder reactor also be reactivated?”

The Japan News on 6th March, 2016 on page 4 it said,

“TEPCO plans to expand the frozen shield area in stages. It is estimated that the increase in contaminated water will be reduced to less than one tenth of the current volume if all of the shields are put into operation. We want TEPCO to steadily proceed with the operation of the soil shields...”

Unlike *The Japan Times*, which gave much emphasis on the more negative results of the use of nuclear energy, *The Japan News* gave more space to present positively the after effects of the 3/11 great earth quake and how they should be restored or improved. For example, *The Japan News* on 6th March, 2016 put the following heading in their editorial. “Stable operations of frozen soil shields vital for reviving fishery in Fukusima”

Discussion

This research was initiated to find out the answers to the following 3 main questions. Namely, can evidence of framing be found in nuclear discourse of at 5-Year Memorial of Great East Japan Earthquake (2016) in the two newspapers, namely *The Japanese News* and *The Japanese Times*? What specific media frames and media packages can be identified? Is the news discourse sponsored and packaged by competing interest groups or political actors? Is the use of sources about the nuclear discourse of at 5- Year Memorial of great east Japan earthquake in the two mentioned newspapers the same or different? Do the frames vary between the same two newspapers?

The news content and frame analysis based on Gamson and Lasch's Signature matrix (1983) and also making use of Wolfsfeld's approach (1997) shows that in both papers, there were evidences of framing in nuclear discourse of 5- Year Memorial of Great East Japan Earthquake in March 2016. The following three main frames, and were identified by the two researchers who did readings independently namely, the “anti-nuclear frame of *The Japan Times*, and the “for-nuclear energy frame” of *The Japan News* and “Humanitarian frame” which was common to both newspapers. The two newspapers showed different attitudes to the main nuclear usage in Japan. *The Japan Times* highlighted the dangers of use of nuclear energy in earth quake prone Japan, but *The Japan News* took a kind of softer approach or black swan approach of news reporting to the nuclear disaster. From the news content and the editorials of *The Japan News* also showed that some news items and editorials showed that they were sponsored and packaged by interested parties. This was however not surprising because, it is said that *The Japan News* or *The Yomiuri Shimbun* had a history of promoting nuclear power within Japan. In a way this research further confirms the findings of (Abe, 2015), who

said that the attitude of *The Japan News* was that “Japan needs nuclear energy to keep its economic- technological leading position in the international society”. Even, (Yoshino 2013) in his research said that *The Japan News* “appeared to take a stance closer to that of the cabinet office and the ruling party DPJ in covering these issues”.

At times both newspapers made use of the same sources, but the slant was different. Both newspapers used local correspondents and staff writes for the news content. *The Japan Times* used more hard news on the 3/11 event while *The Japan News* used more soft news on the event. All though, analysis of one-month period is not enough to conclude or to generalize, the analysis shows that definitely there are evidence of framing and news packaging and sponsorship by interested parties. Another noteworthy feature of *The Japan Times*, was the use of color and black and white photographs reminding us the adage “one picture is worth thousand words. Naturally the photographs made more impact on the readers about the negative consequences of the nuclear use. One major limitation of this research paper was that this research is based on two main English mostly read newspapers, while we know somehow English is not the main spoken language of Japan. It is up to the future researchers to undertake similar research on native, namely on Japanese newspapers on similar topic of interests. However, we feel from this analysis Media in Japan has a long way to go to become a watch dog in order to strengthen democracy and right of the Japanese people to have correct information on good governance. By-partisan attitudes of media does not auger well for Japan, because it is well established that, Japan is a media-saturated nation where the level of consumption of both newspapers and television is extremely high by global standards. Furthermore, it is reported that the news media have the deep trust of the public (Open Source Center Media aid, 2009). The wide reach of news reporting, and the trust it has earned from the Japanese people, give journalists remarkable influence on the public agenda. With the wide spread of social media, and their easier access allow people to know what is really happening instantly even in closed doors. Unlike in the past, new forms of social media, informs and empowers, and extend our eyes and ears far and wide in search of the truth.

This study warns us not to believe the media blindly, but to be discerning and to be intelligent readers, checking the accuracy of media reports especially on important matters like the use of nuclear energy in Japan. Though, mass media can saturate us with variety of messages, ideologies, and beliefs, as Fiske (1987) suggests that people need to become not passive audiences but intelligent “readers” who “read” decode sights and sounds as well as printed texts.

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